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WELCOMING REMARKS*

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I ARISE ON BEHALF OF the host institution to add the warm greetings of the Academy. This meeting, as you are all aware, reflects the convergence of multiple forces in American residency training, education, and health care. One of them is an old one, a general desire to make residency training as fruitful as it possibly can be, to have graduate medical education so arranged that we produce a physician product with an appropriate set of characteristics, namely, technical competence, a humane approach to the sick, and a commitment to life-long learning. A second force that has assembled us here has been a move on the part of the state government to change some of the processes of residency training with the hope of improving patient care. A third has been an assumption that limited duty tours will reduce house staff stress, produce better patient care, and, perhaps, better doctors. The Part 405 regulations have been in place for about 18 months. We want in this conference to examine something of their intent, the modes of adjustment to them, their application and their impact. As you are all richly aware, there is no

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dearth of experts on these regulations. Every one has a correct opinion about them, and many observers have been quite vocal.

It is clear, I think, that the business of examining residency training has fallen on very fertile ground, witness the rapidly expanding literature, particularly in the past year. On this subject, efforts have actually been made to assemble some data on residency training for the first time, on what residents do, on how well they do it, on how much they sleep, and on how much they are with patients in the course of an average day. We have learned a few things to this point that seem reasonably clear, and there are other matters of informed opinion that are probably correct. One thing we have learned or reaffirmed is that the educational component of residency training has to be separated from service requirements, and that separation should be viewed as a central good. We have learned that continuity of care and the development and preservation of the habit of commitment to patients is a central characteristic of the properly organized physician. We have learned that interferences with the educational functions of residency training and with continuity of care are themselves stressful to residents in training.

We have learned that implementing these regulations is going to be expensive, and will require a very large number of additional people if we are to meet the letter of the regulations. The funding of the costs turns out to be unstable to some degree and the additional people required difficult to find and to recruit. As you know, the Residency Review Committee in Internal Medicine has moved to make some of the regulations a national standard, although this is not yet firm and in place. We will hear more about that later today. Studies have shown that interns work a lot harder than they used to.[1] They have more admissions, they do more procedures, they have sicker patients, and they have patients churning through clinical services with far shorter hospital stays. We have also learned, to my distress, that the hours spent in direct patient contact are very few. One recent study found 12% of the daytime activity and 37% of nighttime activity of interns was spent in contact with patients.[2] I would submit that it is very difficult to learn to be a superior physician with that kind of limited patient exposure.

Another intriguing study, in which interns were followed around by trained observers, demonstrated that interns averaged on one service about 21 beeps during a 30 hour tour and on another service up to 1.8 beeps per hour with no difference between day or night.[3] So one to two beeps an hour seems to be about the average. Intern sleep varies widely, 2½ to 7 hours depending on the hospital service and on what one reads. In one very interesting recent study,[4] in which portable EEG monitors were placed on house staff heads, and house

staff functioning was measured, it turned out that the quality of sleep is an extraordinarily important thing; interns who were fatigued and had the night off, and had protected sleep, that is sleep under the wing of a night float, were restored to a sense of well-being and to normal functioning, at least as measured by an appropriate set of tests after 3½ to 4 hours of protected sleep, whereas up to 7 hours of unprotected sleep, that is, sleep while on call, did not refresh, did not restore a sense of well-being and did not restore normal functioning according to the tests.

I mention that because in a sense in looking at these regulations we are looking in part at a prescription for a perceived, if not diagnosed, disorder. This kind of study is an experimental approach, an effort to get some data, and the authors say quite correctly that we should be no less careful in establishing the validity of the treatments we are prescribing in this instance than we are in any other.

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